

### **REMARKS**

Claims 15-33 are pending in this application. All claims are rejected. Claims 17, 18, 26-29, and 32 are canceled, and new claims 34 and 35 are added as shown above. Applicants note that the subject matter of canceled claim 18 was incorporated into amended claim 15. Applicants submit that no new matter is added as support for the amendments exists in the specification and claims as originally filed.

#### **Rejections under 35 U.S.C. § 103(a)**

The present invention is generally directed to a (block A)-(block B) diblock copolymer, a (block A)-(block B)-(block A) triblock copolymer or a (block B)-(block A)-(block B) triblock copolymer.

#### **Lewis**

Claims 15-33 are rejected under 35 U.S.C. § 103(a) as obvious over Lewis (WO 02/28929). *See* Office Action at 2. According to the Office Action, Lewis discloses zwitterionic polymers having controlled architectures and comprising zwitterionic monomers as defined by formula I, and at least one anionic, cationic, or non-ionic co-monomer. *See* Office Action at 2 (citing Lewis at p. 4, line 4 to p. 8, line 4). According to the Office Action, Lewis discloses suitable co-monomers that include block B monomers. *See id.* (citing Lewis at p. 8, line 5 to p. 9, line 7). The Office Action also states that Lewis teaches using the resultant zwitterionic polymer as an intermediate for the preparation of block copolymers. *See* Office Action at 3. (citing Lewis at p. 11, lines 5-17 and p. 16, line 22 to p. 17, line 20). According to the Office Action, "it would have been obvious to one having ordinary skill in the art to prepare a block copolymer comprising a zwitterionic polymeric segment and a nonionic block segment within the scope of

the instant claims, motivated by the reasonable expectation of success in preparing polymer products having controlled architectures and resultant properties." Office Action at 3. Applicants respectfully traverse.

Applicants have amended independent claim 15 to remove recitation of zwitterionic units  $A_z$  and to clarify what is claimed, and Applicants submit that Lewis does not teach or suggest the claimed diblock or triblock copolymers. Lewis teaches zwitterionic monomers that may be polymerized with another block comprising anionic, cationic, or non-ionic monomers. Lewis at p. 7-8. Applicants respectfully submit that Lewis does not teach or suggest a mixture of cationic and anionic units in the same block, or a diblock or triblock copolymer additionally comprising block B, which is not amphoteric or zwitterionic. Accordingly, Applicants submit that the claims are patentable over Lewis because it would not been obvious to one of ordinary skill in the art to modify the teaching of Lewis to arrive at the specific di- and triblock copolymers of the instant claims.

Tamazawa

Claims 15-17, 19-31 and 33 are rejected under 35 U.S.C. § 103(a) as obvious over Tamazawa (US 6,174,963). See Office Action at 3. Applicants note that the subject matter of claim 18, which is not rejected over Tamazawa, has been incorporated into independent claim 15, from which all pending claims depend. For at least this reason, Applicants respectfully submit that this rejection should be withdrawn.

Das or Aubay or Bunyard or JP-09-279084

Claims 15-16, 19-31 and 33 are rejected under 35 U.S.C. § 103(a) as obvious over Das (US 4,395,444) or Aubay (US 7,071,156) or Bunyard (US 7,141,519) or JP-09-279084. See Office Action at 4. Applicants note that the subject matter of claim 18, which is not rejected

over any of these references, has been incorporated into independent claim 15, from which all pending claims depend. For at least this reason, Applicants respectfully submit that this rejection should be withdrawn.

### CONCLUSION


An indication of allowance of all claims is respectfully solicited. In the event any issues remain, Applicants would appreciate the courtesy of a telephone call to their counsel to resolve such issues and place all claims in condition for allowance.

Respectfully submitted,

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